



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

PRELIMINARY ISSUE

654.0716

Job Sheet 206784



POSITIVE RECALL

EFFECTIVE 2002-11 AUTH
DAS
RELEASED 55 DATE MAR 17 2020
9-89 Priority: Medium

POSITIVE RECALL

Part No: 654.0716

Job Qty: 6 pcs

Part Name: Bushing



Part Weight: 0 lbs

Status: New

Job Created: 2/10/20

Job Tracking No:

Due Date: 2/14/20

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG 654.0716 Rev PR4 IPP Rev. A 2020.02.05 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Hardinge - 1	6 pcs	2/14/20	2/14/20	0.50	0.10	Conventional Lathe - 1		1/ 20/2/20
							Hardinge - 1		
110	QC 2	6 pcs	2/14/20	2/14/20	0.00	0.00	QC 2 - 1		1/ 20/2/20
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		
							QC 2 - 66		
							QC 2 - 64		

AEROSPACE

CANADA
TEL: 1 800
Em: 1 800
WWW.DART

Container No: S257031



Part: 654.0716

Job No: 206784

Serial No/Batch: S257031

Revision: PR4

Inspector:

Exp Date:

Instructions:

Date: 02/10/20

120 QC 8	6 pcs	2/14/20	0.00 0.00	QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 2 - 76	
				QC 8 - 12	
				QC 8 - 14	9/20/02/20
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
				QC 8 - 76	
				QC 8 - 61	
130 Packaging 3-1 - Stock - B4B	6 pcs	2/14/20	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 37 - B4B	
140 QC 21 - SA	6 pcs	2/14/20	0.00 0.00	QC 21 - SA - 21	
				QC 21 - SA - 70	

Part Op 100 - 1-Machine as per folio FC N/A FOLIO REV: N/A DWG REV: PR4 2-Deburr
 Descriptions: 110 - QC2- Inspect parts off machine FAI/FAIB
 120 - QC8- Inspect parts - second check
 130 - Identify as per dwg & Stock Location: _____
 140 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
8503K333	Wear- and Chemical-Resistant PEEK Rod, Beige, 3/4" Diameter, 4 ft. Long	.1332 (.0222 ea)	100-Hardinge - 1	S255647

Job Allocations

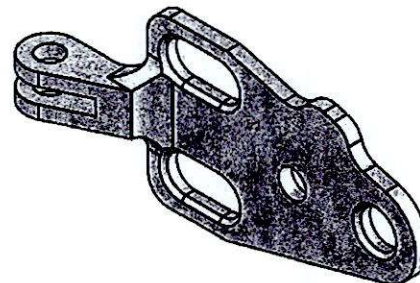
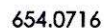
Operation	Component Part	Required	Inventory	Allocated
100-Hardinge - 1	8503K333	0	0	0

Part Specifications	
Specifications could not be found.	

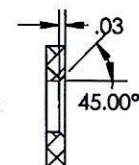
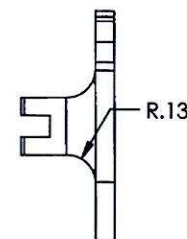
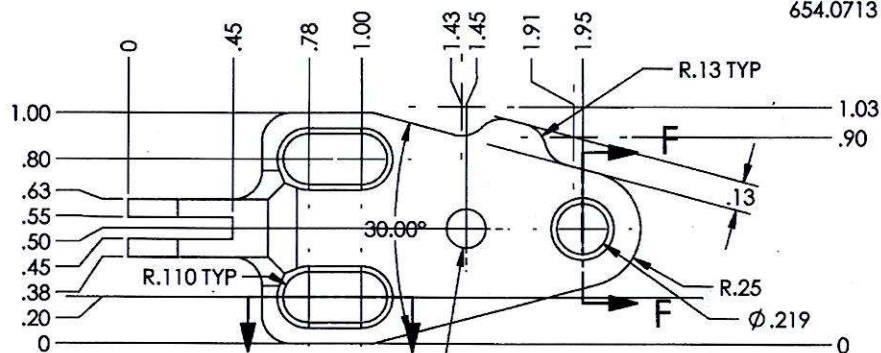
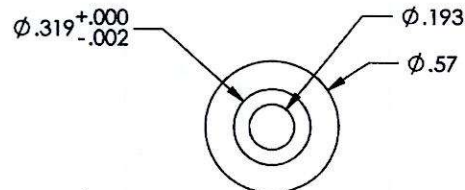
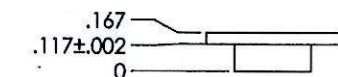
Plex 2/10/20 9:33 AM Dart.lajeunesse.marie

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.

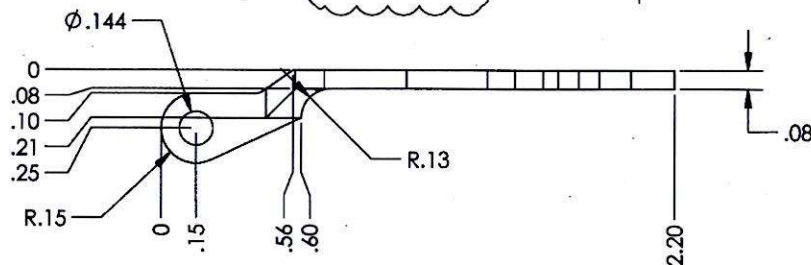
WITHOUT NOTICE
WORK ORDER
NO. 200784M5
20-02-20



654.0712 SHOWN
654.0713 MIRROR



SECTION F-F



ORIGINAL DATE JUN-04-78	07-14-78	 DART AEROSPACE AERIAL INDUSTRIES, INC. 3030 ENTERPRISE CT. SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY L. MURPHY	DESIGNED BY P. BRAVO		
CHECKED BY P. BRAVO	APPROVED BY P. BRAVO		
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS .001 2 PLACE DECIMALS .005 1 PLACE DECIMAL .015		AW169 JUNCTION BOX	
REV	DATE CODE	DWG. NO.	REV
1	07/04/78	654.0707	1
SCALE		NONE	
B		SHOWN 5 OF 4	

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor		
			QC / QA Coordinator		
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details: _____					



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB045837



Supplier: MCM001-VUJ
McMaster-Carr Supply Co,
P.O. Box 7690
Chicago, IL 60680-7690 USA
Phone: 330 995 5500
Fax: 330 995 9600

Attention: N/A,

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB045837

PO Date: 2/12/20

Due Date: 2/14/20

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
Phone: 613-623-5200 Ext: 242
Fax: 613-632-1053
clavoie@dartaero.com

Via: Ground

Pynt Terms: Net 60

Freight Terms:

Special Comments:

FEB 12 2020

Items												
Line Item	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	8538K133			Wear- and Chemical-Resistant PEEK Rod, Beige, 3/4" Diameter, 4 ft. Long	Firmed X4	-	2/14/20	4 ft	0 ft	4 ft	\$39.45/ft	\$157.80
									FEB 13 2020			
2	85385T403	647.1200		Screen	Firmed X4	-	2/14/20	4 sf	0 sf	4 sf	\$7.865/sf	\$31.46
									FEB 13 2020			
Line Item Note: 1 piece of 2ft x 2ft = 4 sf												
3	AT-01-R0.750		8893K19 6 FT long	Tool Steel Round Bar 0.750 dia. : Material: AISI 01 TOOL STEEL ROUND BAR DIN 1.2510 or B.S. BO 1 or SAE J437 or SAE J438 or UNS T31501 or ASTM A681 receive ft	Firmed X6	-	2/14/20	6 ft	0 ft	6 ft	\$7.14666/ft	\$42.88
									FEB 13 2020			
Grand Total:												\$232.14



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PURCHASE ORDER

POHB045837



Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY
A016 PERSONNEL QUALIFICATION
A026 CERTIFICATION OF MATERIAL CONFORMANCE
A032 DOCUMENT SPECIAL REQUIREMENTS
A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS
A040 NOTIFICATION OF QUALITY ESCAPE
A041 QUALITY MANAGEMENT SYSTEM
A042 DART NOTIFICATION BY SUPPLIER
A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
A049 SUPPLIER AWARENESS

CL

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 2/12/20 12:13 PM Dart.Lavoie.Chantal



McMASTER-CARR®

Packing List

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada
Attention: N/A

Purchase Order
IPIS045837

Order Placed By
Chantal Lavoie

McMaster-Carr Number
1109556-02

Page 1 of 1

02/12/2020

Line	Product	Ordered	Shipped
1	8503K333 Wear- and Chemical-Resistant PEEK Rod, Beige, 3/4" Diameter, 4 Feet Length	4 Feet	4
3	8893K19 Tight-Tolerance Oil-Hardening O1 Tool Steel Rod, 0.7500" Diameter, 6 Feet Long	1 Each	1

Certificate of compliance

This is to certify that the above items were supplied in accordance with the description and as illustrated in the catalog. Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.

Sarah Weinberg
Compliance Manager

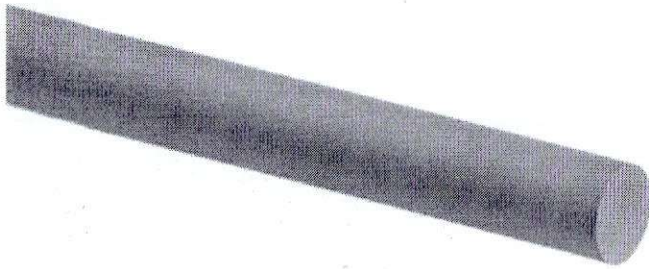
DART AEROSPACE LTD.



Wear- and Chemical-Resistant PEEK Rod

Beige, 3/4" Diameter

In stock
\$39.45 per ft.
8503K333



Material	PEEK Plastic
Shape	Rod and Disc
Texture	Smooth
Diameter	3/4"
Diameter Tolerance	0.000" to 0.015"
Rating	Oversized
Hardness	Rockwell R126
Hardness Rating	Hard
For Use Outdoors	No
Temperature Range	-20° to 480° F
Impact Strength	0.6-0.95 ft.-lbs./in.
Impact Strength Rating	Poor
Tensile Strength	14,000-16,000 psi
Tensile Strength Rating	Excellent
Color	Beige
Clarity	Opaque
For Use With	Acetic Acid, Acetone, Bleach, Coolant, Diesel Fuel, Fuel Oil, Gasoline, Heating Oil, Hydraulic Fluid, Hydrochloric Acid, Hydrogen Peroxide, Isopropyl Alcohol, Kerosene, Methanol, Methyl Ethyl Ketone (MEK), Mineral Oil, Phosphoric Acid, Sodium Hydroxide, Water
Chemical Resistance	
Excellent	Acetic Acid, Acetone, Bleach, Coolant, Diesel Fuel, Fuel Oil, Gasoline, Heating Oil, Hydraulic Fluid, Hydrochloric Acid, Hydrogen Peroxide, Isopropyl Alcohol, Kerosene, Methanol, Methyl Ethyl Ketone (MEK), Mineral Oil, Phosphoric Acid, Sodium Hydroxide, Water
Not	Chlorine, Nitric Acid, Sulfuric

Recommended	Acid
Not Rated	Lacquer Solvents, Synthetic Oil, Vegetable Oil
Fabrication	Extruded
Density	0.047 lbs./cu. in.
Flexural Modulus	530,000-600,000 psi
Flexibility	Semi-Rigid
Coefficient of Friction	0.2-0.4
Friction Rating	Slippery
Dielectric Strength	480 V/mil
Electrical Insulation Rating	Good
Water Absorption	0.1-0.45%
Water Absorption Rating	Poor
Coefficient of Thermal Expansion	$2.5 \text{ to } 2.6 \times 10^{-5} \text{ in./in./}^{\circ}\text{F}$
Thermal Stability	Excellent
Comparable To	Ketron, TecaPEEK
Warning Message	Physical and mechanical properties are not guaranteed. They are intended only as a basis for comparison and not for design purposes.
Length	1 ft., 2 ft., 3 ft., 4 ft.
Specifications Met	ASTM D6262, Made of FDA Listed Material, UL 94V0
Performance Properties	Chemical Resistant, Electrical Insulator, Food Contact, High Strength, High Temperature, Low Thermal Expansion, Slippery, Wear Resistant
REACH	REACH (EC 1907/2006) (07/16/2019, 201 SVHC) Compliant
RoHS	RoHS 3 (2015/863/EU) compliant

Even when exposed to chemicals, these rods and discs remain wear resistant. Made of PEEK, they stand up to repetitive processes as well as abrasion. They're sometimes used as a lightweight substitute for metal parts in high-stress applications.

†

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 85031C333 PEEK 160L

PO / BATCH NO.: POHB045837/

DATE: FEB 18 2020

5255647

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 4 ft
 QUANTITY INSPECTED: 4 ft
 QUANTITY REJECTED: -

THICKNESS ORDERED: .75" 0
 THICKNESS RECEIVED: .75" 0
 SHEET SIZE ORDERED: -
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	D6262 (ASTM)
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	POHB 045837
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.
 RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION

ENGINEERING SIGNOFF (if required)

INSPECTED BY: V.M

DAS
81
9-89

SIGNED OFF BY: _____

DATE: _____

DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in